12

CA

Acidity as an index of freshness of regenerated milk. G. A. Dual-Berg (Leningrad Pediat. Inst.). *Gigiena i Sanit.*, 1951, No. 11, 37–40.—The initial acidity of milk regenerated from powd. milk depends on the pH of the powder and of the water used. As the regenerated milk is stored the biochem. changes in it alter the acidity, but the variations are such as to prevent a simple interpretation. In addn., buffer effects serve to minimize the pH variations.

G. M. Kosolapoff

DAAL'-BERG, G. A.

DAAL'-BERG, G.A.

Methods for determining adulteration of human milk. Pediatriia no.7:52-54 Jl '57. (MIRA 10:10)

1. Iz otdela gigiyeny Leningradskogo nauchno-issledovatel'skogo pediatricheskogo instituta (dir. - prof. A.L.Libov)
(MILK--ANALYSIS AND EXAMINATION)

ALEKSANDROV, N.I., polkovnik med.sluzhby; GEFEN, N.Ye., polkovnik med.sluzhby; GARIN, N.S., podpolkovnik med.sluzhby; GAPOCHKO, K.G., podpolkovnik med.sluzhby; DAAL'-BERG, I.I., podpolkovnik med.sluzhby; SERGEYEV, V.M., podpolkovnik med.sluzhby

Reactivity to and effectiveness of aerogenic vaccination against certain zoonoses. Voen.-med.zhur. no.12:34-38 D '58. (MIRA 12:12)
(VACCINES AND VACCINATION,
against aerogenic zoonoses (Rus))

DA -PJ

ROGOZIN, Isaak Iosifovich, red.; BELYAKOV, V.D., red.; KOLOSTELEV, V.Ye., red.; MIKHAYLOVSKIY, V.T., red.; SOLODILOV, Ye.V., red.; LABEZOV, G.I., red.; SHURA-BURA, B.L., red.; DAAL'-BERG, I.I., red.; LEBEDEVA, Z.V., tekhn. red.

[Military epidemiology]Voennaia epidemiologiia. Leningrad, Medgiz, 1962. 135 p. (MIRA 15:11)
(EPIDEMIOLOGY) (MEDICINE, MILITARY)

DĄB-KOCIOŁ, J.

"Tasks of the technical intelligentsia in agriculture." p. 7 (Nowe Rolnictwo, Vol. 2, no. 8, Aug. 1953. Warszawa.)

SO: Monthly List of East European Accessions, Vol. 3, No. 2, Library of Congress, Feb. 1954, Uncl.

DAB-KOCIOL, J.

"You Must Not Separate Professional Activity From Practical Tasks." p. 126
(Przeglad Geodezyjny. Vol. 9, no. 5 May 1953 Warszawa.)

Vol. 3, no. 6
SO: Monthly List of East European Accessions./Library of Congress, June 1954, Uncl.

DAB-KOCIOL, J.

"Rural electrification in the light of resolutions adopted at the 9th Plenum of the Central Committee of the Polish United Workers Party." p. 93. (Przeglad Elektrotechniczny, Vol. 30, no. 3, Mar 54, Warszawa)

SO: Monthly List of East European Accessions, Vol 3 No 6 Library of Congress Jun 54 Uncl

DAB-KOCIOL,J.

National Forest and Afforestation Day. p.1

LAS POLSKI. (MInisterstwo Lesnictwa oraz Stowarzyszenie Naukowo-Techiczne Inzynierow i Technikow Lesnictwa i Drzewnictwa) Warszawa, Poland
Vol.29, no.4 Apr. 1955

Monthly list of East European Accessions (EEAI) LC, Vol.9, no.2, Feb. 1960

Uncl.

DAB-KOCIOL, J.

Together. p. 225.
(PRZEMYSL DRZEWNY. Vol.7, no. 8, Aug. 1956, Warszawa, Poland)

SO: Monthly List of East European Accessions (EEAL) LC. Vol. 6, No. 12, Dec. 1957. Uncl.

DAF-[illegible], J

Fifteen years of forestry in People's Poland. p. 1.

LYWIN. (Wydział Nauk Rolniczych i Leśnych Polskiej Akademii Nauk i Polskie Towarzystwo Leśne) Warszawa, Poland. Vol. 103, no. 7/9, June-July 1959.

Monthly List of East European Accessions (EEAI) LC, Vol. 9, no. 1, Jan. 1960.

Encl.

DABAC, P.

"Isotopes in research and production" by H. Franckowiak. Reviewed P. Dabac. Energija Hrv 10 no. 5/6:214 '61.

DABAC, V.

Water supply through aqueducts in the eastern section of Croatia. p. 19.
(GLASNIK, Vol. 1, No. 1/2, 1957

SO: Monthly List of East European Accessions (EEAL) LC Vol. 6, No. 12, Dec. 1957
Uncl.

DABAC, V.

Preparation for the construction of the Electric-power Plant in Zagreb. p. 348.

ENERGIJA. (Zajednica elektroprivrednih poduzeca Hrvatske i Institut za elektroprivredu u Zagrebu) Zagreb, Yugoslavia. Vol. 7, no. 10, 1958.

Monthly List of East European Accessions (EEAI) LC, Vol. 8, no. 6, June 1959.

Uncl.

DABAC, Vlatko, inz. (Zagreb, Dvorniciceva ul. 20)

Scientific work in some industrial countries. Pt. 2.
Automacija Zagreb 2 no. 2/4:69-77 '62.

DABAC, Vlatko, inz.

Computing the pressure losses in electric conduits. Energija Hrv 11 no.3/4:95-96 '62.

1. Tehnicki urednik, "Energija".

KANASH, S.S., akademik; MAL'TSEV, A.M.; VLASOVA, N.A.; PASHCHENKO, Z.M.; ROZHANOVSKIY, S.Yu.; MAUYER, F.M.; MOKEYEVA, Ye.A.; KLYUYEV, G.A.; BURYGIN, V.A.; SHLEYKHER, A.I.; RUMI, V.A.; ROMANOV, I.D.; AVTONOMOV, A.I., otv.red.; MUKHAMEDZHANOV, M.V., akademik, glavnyy red.; RYZHOV, S.N., akademik, zamestitel' glavnogo red.; ALIMOV, R.A., red.; DABADAYEV, A.D., akademik, red.; DZHALILOV, Kh.M., kand. ekon.nauk, red.; YEREMENKO, V.Ye., akademik, red.; ZAKIROV, K.Z., akademik, red.; MANNANOV, N.M., akademik, red.; NABIYEV, M.N., akademik, red.; SADYKOV, S.S., red.; TOGOYEV, I.N., kand.ekon.nauk, red.; YAKHONTOV, V.V., red.; KURANOVA, L.I., red.izd-va; RAKHMANOVA, M.D., red.izd-va; BARTSEVA, V.P., tekhn.red.

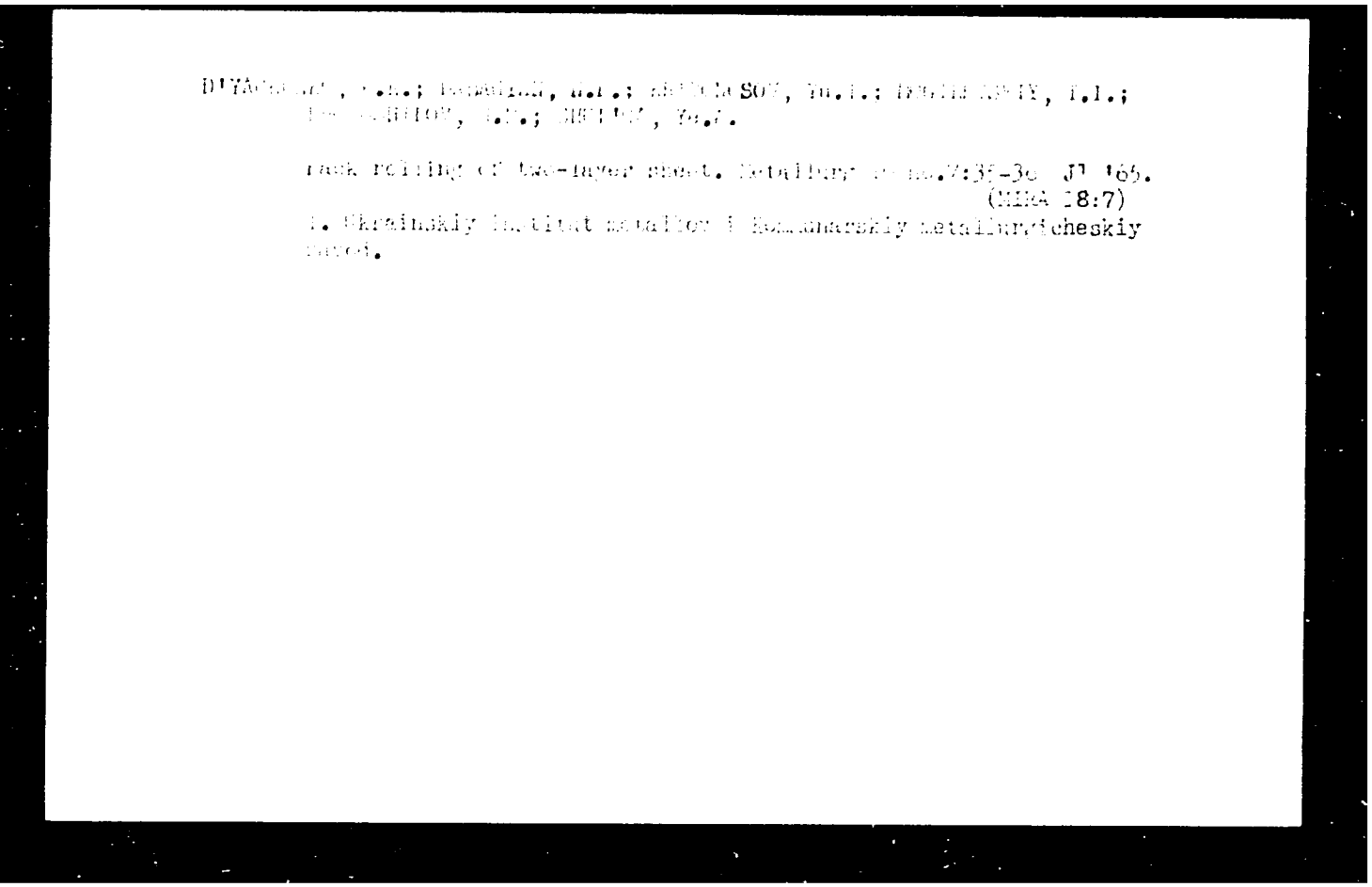
[Cotton] Khlopchatnik. Tashkent. Vol.3. [Structure and development of cotton] Stroenie i razvitie khlopchatnika. 1960. 402 p. (MIRA 13:10)

1. Akademiya nauk Uzbekskoy SSR, Tashkent. 2. Akademiki UzSSR (for Kanash, Mukhamedzhanov, Zakirov, Nabiyev). 3. Vsesoyuznaya akademiya sel'skokhozyaystvennykh nauk imeni V.I.Lenina (for Kanash). 4. TSentral'naya selektsionnaya stantsiya Vsesoyuznogo nauchno-issledovatel'skogo instituta khlopkovodstva Uzbekskoy akademii sel'skokhozyaystvennykh nauk (for Kanash). 5. Tashkentskiy sel'skokhozyaystvennyy institut (for Mal'tsev, Shleykher). 6. Institut genetiki i fiziologii rasteniy AN UzSSR (for Vlasova, Mauyer, Klyuyev, Rumi, Romanov).

(Continued on next card)

KANASH, S.S. --- (continued) Card 2.
7. Srednaaziatskiy gosudarstvennyy universitet (for Pashchenko).
8. Institut botaniki AN UzSSR (for Rozhanovskiy, Mokeyeva, Burygin).
9. Chleny-korrespondenty AN UzSSR (for Avtonomov, Alimov, Yeremenko, Sadykov, Yakhontov). 10. Uzbekskaya Akademiya sel'skokhozyaystvennykh nauk (for Mukhamedzhanov, Ryzhov, Dadabayev, Yeremenko, Zakirov, Mannanov).

(Cotton)



[illegible], V.K.; [illegible], M.I.; [illegible], Yu.I.; [illegible], I.I.; [illegible], L.I.; [illegible], V.F.

Pack rolling of two-layer sheet. Metallurg 11 no.7:35-36 Jl '66. (MIRA 18:7)

1. Ukrainskiy institut metallov i Kommunarskiy metallurgicheskiy zavod.

DABAGOV, N.S.

PHASE I BOOK EXPLOITATION 507/669

Nauchno-tekhnicheskoye obshchestvo neftyanoy promyshlennosti
Za Petroleum Chemistry) Moscow, Gostoptekhizdat, 1960. 852 p. 3,500 copies printed.

Ed.: Dilatova, Arkadiy Il'ich, Professor, and Lev Aleksandrovich Proskuryakov, Professor; Executive Ed.: L.A. Ivova; Tech. Ed.: N.A. Rabkina.

PURPOSE: This book is intended for engineers and chemists of petroleum refineries and chemical plants, for experts of the national economy, planning organizations and scientific research institutes engaged in chemical processing and large-scale utilization of petroleum stock for the production of synthetic products.

COVERAGE: The book describes important commercial methods of producing hydrocarbons petroleum and gas stock and coal stock for the manufacture of alcohols, aldehydes, ketones, acids, detergents, synthetic fibers, and synthetic rubber. Flow sheets are included, and the basic equipment of the petrochemical industry is described. The petrochemical properties and use of intermediate and end synthetic products are also described. The state of the petrochemical industry outside the USSR and prospects for its development are covered. No personalities are mentioned. References follow each chapter.

Card 1/21

DABAGOVA, A.K.

USSR.

Polymerization of [illegible] esters of glycols. A. A. Berlin, E. F. Rodionova, and A. K. Dabagova. Sbornik Statei Obshchei Khim. 2, 1684-9(1953); [illegible] abstr.— The following esters were prepd. from $CH_2:CMeCOCl$ and the various glycols at 0° in the presence of 85% NaOH and a small amt. of Cu_2Cl_2 stabiliser; the yields of 55-60% dropped to 35-40% when NaOH was replaced by pyridine: $(CH_2:CMeCO_2CH_2)_2$ (I), b. 83°, d_{20}^{20} 1.0603, n_D^{20} 1.4545; $(CH_2:CMeCO_2CH_2CH_2)_2O$, b. 134°, d_{20}^{20} 1.0683, n_D^{20} 1.4595; $(CH_2:CMeCO_2CH_2CH_2OCH_2)_2$, b. 163°, d_{20}^{20} 1.0923, n_D^{20} 1.4621. These were polymerized in the presence of 0.1-1.0% Bz_2O_2 in boiling MeOH, using both dilatometric and wt. methods for following the rate of polymerization. The rate of 3-dimensional polymerization was found to rise with increase of spacing between the unsatd. groups of the monomers, a fact contrary to that found among diallyl derivs. Polymerizations of I and of $(CH_2:CHCH_2O_2COCH_2CH_2)_2O$ proceed through formation of a branched, sol. polymer which has double bonds (β-polymer), which then forms the 3-dimensional product. The intermediate was isolated by treatment with Me_2CO and pptn. with MeOH. Good correspondence was found to exist between detns. of polymer formation by dilatometric and gravimetric methods in this series. The kinetic curves are shown. G. M. K.

(Collection of Papers on General Chemistry), Vol. II, Moscow-Leningrad, 1953, pp 1680-1686.

DABAGOVA, A.K.

USSR

Three dimensional polymerization of allyl ethers and mixed allyl ethers of methacrylic esters of glycols. A. A. Berlin, A. K. Dabagova, and K. P. Rodionova. *Sbornik Statei Obshchei Khimii* (Collection of Papaers on General Chemistry), Vol. II, Moscow-Leningrad, 1953, pp 1680-1686.—Reaction of glycols with $CH_2:CMeCOCl$ or $CH_2:CHCH_2OCOCl$ in the presence of pyridine at −10° gave 60–70% of the following derivs.: $CH_2:CHCH_2OCH_2CH_2OCCMe:CH_2$, b_4 69–70°, d_4^{20} 0.0700, n_D^{20} 1.4400; $CH_2:CHCH_2OCH_2CH_2OCH_2CH_2OCCMe:CH_2$, b_4 85–8°, d_4^{20} 1.0270, n_D^{20} 1.4538; $CH_2:CHCH_2O(CH_2CH_2O)_2CH_2CH_2OCCMe:CH_2$, b_4 undistd. owing to polymerization, d_4^{20} 1.0550, n_D^{20} 1.4587; $CH_2:CMeCO_2CH_2CH_2OCCH:CH:CH_2$, b_4 106°, d_4^{20} 1.0820, n_D^{20} 1.4500; $CH_2:CMeCO(CH_2)_2O(CH_2)_4CO_2CH_2CH:CH_2$, b_4 119–20°, d_4^{20} 1.1020, n_D^{20} 1.4500; $CH_2:CMeCO(CH_2CH_2O)_2COCH_2CH:CH_2$, polymerizes on attempted distn., d_4^{20} 1.1070, n_D^{20} 1.4585; $(CH_2O_2CCH_2CH:CH_2)_2$, b_4 127.5°, d_4^{20} 1.1210, n_D^{20} 1.4445; $O(CH_2CH_2O_2CCH_2CH:CH_2)_2$, b_4 161°, d_4^{20} 1.1400, n_D^{20} 1.4515; $CH_2:CHCH_2OCH_2CH_2O_2CCH_2CH:CH_2$, b_4 85.5°, d_4^{20} 1.0384, n_D^{20} 1.4415. The intermediate allyl ethers were prepd. from HCl or HBr and the corresponding Na deriv. of the glycols; $HOCH_2CH_2OCH_2CH:CH_2$ (I), b. 159–60°, d_4^{20} 0.9820, n_D^{20} 1.4355; $HO(CH_2CH_2O)_2CH_2CH:CH_2$, b_4 96–101°, d_4^{20} 1.012, n_D^{20} 1.4440; $HO(CH_2CH_2O)_3CH_2CH:CH_2$, b_4 115–18°, d_4^{20} 1.0609, n_D^{20} 1.4530. Passage of ethylene oxide into $CH_2:CHCH_2OH$ and 3% concd. H_2SO_4 at 50–60° gave 50–5% yield of I. Polymerization of these esters were run in pure state and in 25% MeOH solns. The results, given graphically, show the following. The methacrylyl-allyl derivs. of the glycols and methacrylic- "carballylic" derivs. polymerize more rapidly than do "biscarballylic" or allyl "carballylic" derivs. Generally the increase of the distance between the functional groups of the above esters leads to increase rate of 3-dimensional polymerization; in "biscarballylic" esters this relationship is reversed. The principal factor affecting the rate of polymerization in MeOH is the steric factor which establishes the distance between the functional groups of the monomer. G. M. K.

DAPAGOVA, A. K., and ANDRIANOV, K. A.

"Silicones with electrolytic groups," a paper presented at the 9th Congress on the Chemistry and Physics of High Polymers, 28 Jan-2 Feb 57, Moscow, Organic Chemistry Research Inst.

B-3,084,395

20 119-6 26/56

AUTHORS: Andrianov, K. A., Corresponding Member, Academy of Sciences USSR, Dabagova, A. K.

TITLE: The Synthesis of Organosilicic Compounds Containing a Methacryl Group (Sintez kremniyorganicheskikh soyedineniy soderzhashchikh metakril'nuyu gruppu)

PERIODICAL: Doklady Akademii nauk SSSR, 1958, Vol. 119, Nr 6, pp. 1149-1151 (USSR)

ABSTRACT: In the present paper the former investigations (Ref 1) are developed. The compounds synthesized contain the mentioned group at the silicon atoms: they are methacryl methyl alcoxy-silanes and methacryl compounds (tri-, tetra- and penta-siloxanes). The afore-mentioned compounds are produced according to a scheme:

$$ClCH_2Si(CH_3)_n(OR)_{3-n} + CH_2=C(CH_3)COOK \xrightarrow{-KCl} CH_2=C(CH_3)COOCH_2Si(CH_3)_n(OR)_{3-n}$$

Card 1/3

20-119-6-26/56

The Synthesis of Organosilicic Compounds Containing a Methacryl Group

where R = C_2H_5, C_4H_9 and n = 2; 1; 0.

The properties of the produced compounds are shown by table 1. In order to obtain the mentioned methacryl compounds the reaction of the heterofunctional co condensation of the aforementioned alcoxy silanes was investigated with dimethyl diacetoxysilane, furthermore with its hydrolysis products, as well as with trimethylacetoxysilane. The reactions are illustrated by formulae. It was found that this reaction proceeds easily and therewith the siloxane methacryl compounds form at about 20°C during separation of ethyl acetate, if ethyl sulfuric acid is used as catalyst (with a minimum of 2 percent by weight of water). The properties of the produced compounds are shown by table 2. A detailed description of the synthesis is given in another paper (sent to "Izvestiya AS USSR, Department for Chemical Sciences"). The methacryl compounds synthesized are produced for the purpose of obtaining organosilicic polymers, as well as block polymers. Then follows an experimental part with usual data. There are 2 tables and 1 reference, 1 of which is Soviet.

Card 2/3

ANDRIANOV, K.A.; DARAGOVA, A.K.

Polymerization of unsaturated organosilicon compounds. Vysokom. soed. 1 no.6:930-933 Je '59. (MIRA 12:10)

1.Institut elementoorganicheskikh soyedineniy AN SSSR.
(Silicon organic compounds)
(Polymerization)

BERLIN, A.A.; DABAGOVA, A.K.

Synthesis and polymerization of glycidylurethans. Vysokom.soed. 1 no.7:946-950 Jl '59. (MIRA 12:11)

1. Vsesoyuznyy nauchno-issledovatel'skiy institut aviatsionnykh materialov.
(Urethans) (Polymerization) (Glycidic acid)

S/079/60/030/06/06/009
B002/B016

53830

AUTHORS: Andrianov, K. A., Dabagova, A. K.

TITLE: Esterification of Bis(hydroxy-methyl)-tetramethyl-disiloxane by Means of Organic Acid Chlorides

PERIODICAL: Zhurnal obshchey khimii, 1960, Vol. 30, No. 6, pp. 1968-1971

TEXT: The properties of bis(hydroxy-methyl)-tetramethyl-disiloxane were investigated to find out whether the universal esterification methods may be applied to this compound. The stability of this compound was investigated by changing the conditions of synthesis. Bis(hydroxy-methyl)-tetramethyl-disiloxane was obtained from bis(acetoxy-methyl)-tetramethyl-disiloxane by treating it with methanol in the presence of HCl (for 72 hours at 20°). The methyl acetate resulting in addition to the former and the excess of methanol were distilled from the acid reaction mixture or from the mixture previously neutralized by means of sodium bicarbonate. The content of hydroxyl groups and Si in the compound remained unchanged both in the neutralized reaction mixture and in the compound distilled off; both were stable for four months (no change of viscosity, no water

Esterification of Bis(hydroxy-methyl)-tetra-methyl-disiloxane by Means of Organic Acid Chlorides

S/079/60/030/06/06/009
B002/B016

separation). The bis(hydroxy-methyl)-tetramethyl-disiloxane thus obtained was esterified with methacrylic acid chloride and allyl formic acid chloride. The reaction schemes are given. The starting material + allyl formic acid chloride gave bis(carbox -allylate-methyl)-tetramethyl-disiloxane (yield: 30%), whereas the reaction: starting material + allyl formic acid chloride + methacrylic acid chloride led to 1-methacrylate-methyl-2-carboxy-allylate-methyl-tetramethyl-disiloxane (yield: 19%). The poor yield is explained by the considerable tendency of the reaction products toward further polymerization. Polymerization with peroxy initiators proceeds very smoothly. Solid, vitreous polymers are formed. The properties of the substances synthesized are tabulated. The reactions are described in detail in an experimental part. There are 1 table and 1 non-Soviet reference.

Card 2/3

Esterification of Bis(hydroxy-methyl)-tetra-methyl-disiloxane by Means of Organic Acid Chlorides

S/079/60/030/06/06/009
B002/B016

ASSOCIATION: Institut elementoorganicheskikh soyedineniy Akademii nauk SSSR (Institute of Elemental-organic Compounds of the Academy of Sciences of the USSR)

SUBMITTED: June 23, 1959

Card 3/3

ANDRIANOV, K.A.; DABAGOVA, A.K.; SYRTSOVA, Zh.S.

Mutual heterofunctional condensation of methyl (phenyl)acetoxysilanes with organosilicon compounds containing ethoxy group at the silicon atom. Izv. AN. SSSR. Otd. khim. nauk no.9:1572-1577 S '62. (MIRA 15:10)

1. Institut elementoorganicheskikh soyedineniy AN SSSR.
(Silane) (Silicon organic compounds)

ANDRIANOV, K.A.; DABAGOVA, A.K.; KUZNETSOVA, I.K.

Synthesis of unsaturated phosphorooganosilicon compounds of the siloxane series. Izv.AN SSSR.Otd.khim.nauk no.9:1664-1666 S '62. (MIRA 15:10)

1. Institut elementoorganicheskikh soyedineniy AN SSSR.
(Silicon organic compounds) (Phosphorus organic compounds)

L 17164-65 EWT(m)/EWP(e)/EPF(c)/EWP(v)/EPR/EWP(j)/T/EWP(b) Pc-4/Pq-4/Pr-4/Pa-4 AFWL/AS(mp)-2/AFMD(c)/ASD(m)-3/SSD/SSD(a)/ESD(ga)/ESD(t) WW/

ACCESSION NR: AR4049263 RM/WH S/0031/64/000/016/S014/S014

SOURCE: Ref. zh. Khimiya, Abs. 16S73

AUTHOR: Baygozhin, A.; Sergeyev, L. V.; Dabagova, A. K.; Fattakhov, S. G.

TITLE: Adhesion of methylmethacrylate to optical glass

CITED SOURCE: Sb. Vy*sokomolekul. soyedineniya. Adgeziya polimerov. M., AN SSSR, 1963, 75-78

TOPIC TAGS: organic polymer adhesion, polymer glass adhesion, glass surface effect, methylmethacrylate adhesive, oligomeric resin adhesive, optical glass

TRANSLATION: The effects of modifications in the surface of polished optical glass, caused by treating it with vinyl trichlorosilane (I), 2-cyclopropyl-1-trichlorosilyl-propane (II) or methacrylatemethylmethyldiethoxysilane (III), were studied in order to determine the mechanism of adhesion of organic polymers. Carefully degreased glass surfaces were modified by treating them with solutions of I or II in benzene or a solution of III in an aqueous solution of HCOOH (pH 3 to 3.5). Strength of adhesion was determined from the tear strength of components glued with partially polymerized

Card 1/2

L 17164-65
ACCESSION NR: AR4049263

methylmethacrylate oligomer resin (MOS) after the samples were maintained for 10 days at about 20C. The authors also studied a method of modifying glass surfaces by incorporating these modifying admixtures into the adhesive compound. It was demonstrated that the adhesion of MOS to glass increased by 250% after treatment with I and by 700% with III. It was increased by 100% in comparison to the untreated sample when III was added to the composition of MOS. Treatment with II did not improve adhesion. The improvement in adhesion when the glass surface was modified was explained in terms of a chemical bond forming between the adhesive and the glass. It is noted that this procedure makes it possible to control strength of adhesion over a wide range. Z. Ivanova

SUB CODE: MT ENCL: 00

Card 2/2

ANDRIANOV, K.A.; DABAGOVA, A.K.; LEVKOVICH, Ye.A.

Synthesis of (chloromethyl) methylphenylchlorosilane and its derivatives. Izv.AN SSSR. Ser.khim. no.1:97-100 '66. (MIRA 19:1)

1. Institut elementoorganicheskikh soyedineniy AN SSSR. Submitted September 2, 1963.

L 36993-66 EWP(j)/EWT(m)/T IJP(c) RM

ACC NR: AP6008503 SOURCE CODE: UR/0062/66/000/001/0097/0100

AUTHOR: Andrianov, K. A.; Dabagova, A. K.; Levkovich, Ye. A.

ORG: Institute of Heteroorganic Compounds, Academy of Sciences SSSR (Institut elementoorganicheskikh soyedineniy Akademii nauk SSSR)

TITLE: Synthesis of (chloromethyl)methylphenylchlorosilane and its derivatives

SOURCE: AN SSSR. Izvestiya. Seriya khimicheskaya, no. 1, 1966, 97-100

TOPIC TAGS: chemical synthesis, silane, polymerization

ABSTRACT: In this investigation the authors synthesize (chloromethyl)methylphenylchlorosilane from (chloromethyl)methyldichlorosilane and bromobenzene by Grignard's reaction. The yield of distilled (chloromethyl)methlphenylchlorosilane was about 50% of the theoretical. This compound usually reacts with ethanol to form (chloromethyl)methylphenylethoxysilane. The best yield of the new compound, about 90% of the theoretical, was observed when the reaction took place at room temperature. The reaction of (chloromethyl)methylphenylethoxysilane with potassium methacrylate yielded (methylmethacrylate)methylphenylethoxysilane. Its yield was 30% of the theoretical. This compound can be polymerized along the double C-C bond and enters into a condensation and cocondensation refraction owing to the presence of the ethoxy group at the silicon atom.

Card 1/2 UDC: 542.91+546.287

L 36993-66

ACC NR: AP6008503

Polymerization occurs at low temperatures with a slow increase of viscosity with the formation of a vitreous polymer. By cocondensation of this compound with trimethylacetoxysilane in the presence of 10 wt.% conc. HCl the authors obtained 1-[(methylmethacrylate)methylphenyl] trimethyldisiloxane. The reaction product is a transparent, almost odorless liquid polymerizing upon heating in the presence of peroxide initiators. The physicochemical properties of these compounds are given in a table. Orig. art. has: 3 tables.

SUB CODE: 07/ SUBM DATE: 02Sep63/ ORIG REF: 001/ OTH REF: 000

Card 2/2

L 24313-66 EWT(m)/EWP(j) RM

ACC NR: AP6009793 SOURCE CODE: UR/0062/66/000/002/0257/0262

AUTHOR: Andrianov, K. A.; Dabagova, A. K. Golova, M. I.

ORG: Institute of Organoelemental Compounds, Academy of Sciences, SSSR (Institut elementoorganicheskikh soyedineniy Akademii nauk SSSR)

TITLE: The methacrylation of (chloromethyl) ethoxysilanes in the presence of catalytic amounts of acid

SOURCE: AN SSSR. Izvestiya. Seriya khimicheskaya, no. 2, 1966, 257-262

TOPIC TAGS: chemical reaction, reaction mechanism, organosilicon compound, siloxane

ABSTRACT: The nucleophilic substitution of the chlorine of the α-chloromethyl group of ethoxysilane with a methacrylic group was investigated. The reaction will go in the absence of solvents, but it proceeds more readily, giving high yields at lower temperatures, in the presence of catalytic amounts of HCl or organic acids. The proposed reaction mechanism -- formation of an intermediate reaction product with the acid catalyst and decomposition of this oxonium compound by heating -- was confirmed experimentally. The following new compounds were

Card 1/2 UDC: 542.91+546.287

L 24313-66
ACC NR: AP6009793 O

synthesized and characterized: (acetoxymethyl)dimethylethoxysilane, (acetoxymethyl)methyldiethoxysilane, and (acetoxymethyl)triethoxysilane. Orig. art. has: 5 tables and 5 equations.

SUB CODE: 07/ SUBM DATE: 02Sep63/ ORIG REF: 001

Card 2/2

ACC NR: AP6033183 SOURCE CODE: UR/0079/66/036/010/1848/1850

AUTHOR: Andrianov, K. A.; Dabagova, A. K.; Yanovskaya, N. S.

ORG: none

TITLE: Synthesis of methylethoxysilanes containing benzoate and terephthalate groups

SOURCE: Zhurnal obshchey khimii, v. 36, no. 10, 1966, 1848-1850

TOPIC TAGS: methylethoxysilane, benzoic acid, ~~silane derivative~~, terephthalic acid, silane, ~~derivative~~ organosilicon compound

ABSTRACT: The five previously unreported organosilicon compounds containing acyloxymethyl groups were obtained by the reaction of potassium benzoate with the corresponding ethoxymethylchloromethylsilanes on heating in the presence of 3.3—3.9 wt% HCl, as a catalyst:

$$ClCH_2Si(CH_3)_n(OC_2H_5)_{3-n} + C_6H_5COOK \xrightarrow{HCl}$$

$$\rightarrow C_6H_5COOCH_2Si(CH_3)_n(OC_2H_5)_{3-n} + KCl$$

(Ia) $n = 2$, (Ib) $n = 1$, (Ic) $n = 0$.

and by the reaction of potassium terephthalate with ethoxydimethylchloromethylsilane in the presence of HCl:

UDC: 546.287

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ACC NR: AP6033183

$$2ClCH_2Si(CH_3)_2OC_2H_5 + C_6H_4(COOK)_2 \xrightarrow{HCl} \rightarrow C_6H_4[COOCH_2Si(CH_3)_2OC_2H_5]_2 + 2KCl.$$

Composition and physical constants of the new organosilicons are given in the table. Orig. art. has: 1 table [W.A. 50]

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ACC NR: AP6033183

Table 1. Composition of Physical Constants

Formula	bp (p in mm)	n_D^{20}	d_4^{20}	MR_D Found	MR_D Calc'd	Saponification number Found	Saponification number Calc'd
$C_6H_5COOCH_2SiOC_2H_5$ (CH$_3$ on Si)	120—122° (2)	1.4860	1.0269	66.52	66.41	239	235
$C_6H_5COOCH_2Si(OC_2H_5)_2$ (CH$_3$ on Si)	136—138 (2)	1.4770	1.0540	71.84	71.84	214	208
$C_6H_5COOCH_2Si(OC_2H_5)_3$ (CH$_3$ on Si)	128.5 (2)	1.4680	1.0690	77.17	77.28	—	—
$C_6H_4[COOCH_2SiOC_2H_5]_2$ (CH$_3$ on Si)	190—191 (2)	1.4820	1.0480	108.42	106.34	204	260.0
$C_6H_5COOCH_2SiOOC_6H_5$ (CH$_3$ on Si)	173—175 (2)	1.5340	1.1229	87.00	86.17	341	356

SUB CODE: 07/ SUBM DATE: 03Jul65/ ORIG REF: 002

Card 3/3

YERMOLENKO, Valentin Mikhaylovich, aspirant; DÁBAGYAN, Areg Bagarshakovich, doktor tekhn. nauk, prof.

Use of an electronic model in the study of transient processes in a train during the electric braking of the diesel locomotive. Izv. vys. ucheb. zav.; elektromekh. 7 no.5:544-553 '64. (MIRA 17:9)

1. Kafedra dinamiki i prochnosti mashin Khar'kovskogo politekhnicheskogo instituta.

DABAGYAN, A.V., kandidat tekhnicheskikh nauk.

Concurrent vibrations of roter parts in steam turbines. Energomashinostroenie no.6:7-10 Je '56. (MLRA 9:9)
(Steam turbines--Vibration)

AUTHOR: Dabagyan, A.V. (Cand.Tech.Sci.) 110-7-6/30

TITLE: Vibration of the blading of a turbo-set caused by asymmetrical currents in the generator. (Vibratsii lopatochnogo apparata turboagregata, vyzvannye nesimmetriey tokov v generatore).

PERIODICAL: "Vestnik Elektropromyshlennosti" (Journal of the Electrical Industry), Vol.28, No.7, 1957, pp.18-22 (USSR).

ABSTRACT: The most common cause of failure of steam and water turbines is damage to the blading, usually by fatigue. It is usually supposed that most of the trouble is caused by vibration, and that the main causes of vibration are inequalities in the flow of the working medium. These propositions are generally true and they have been used greatly to reduce the amount of damage suffered by blading. They are, however, incomplete. Experiments carried out on blading of stages which had been subject to frequent failures showed that the natural frequency of the blades was different from multiples of the speed of rotation. The blades were found to vibrate only with certain conditions of generator load. Analytical investigations showed that with some asymmetrical loads on the generator the torque could be very complex. It was, therefore, of interest to determine a mechanism by which blades are set in vibration

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by forces acting on the generator rotor, and a special investigation for this purpose was made on a model from which, however, it was only possible to determine the mechanism of energy transfer. Experiments were then made on a dynamic model of a power system designed and manufactured in the Moscow Power Institute (MEI) under the guidance of Prof. V.A.Venikov. The object of the experiment was to determine the spectrum of the torque for various operating conditions of the generator and to elucidate the influence of transitional conditions of the generator on vibration of blades.

The experimental procedure is then described. The torques were measured by strain gauges fixed to the shaft between the generator rotor and the turbine. Measurements were made with symmetrical and asymmetrical change in the working conditions of the system. Comparison of the torque in the two cases gave information about the cause of vibration. The second series of experiments was made to determine the vibration of blading during transitional processes in the electrical part of the system. In this case blades were installed on a special disc between the

Vibration of the blading of a turbo-set caused by asymmetrical currents in the generator. (Cont.)110-7-6/30

generator rotor and the turbine. These blades were not acted upon by the working substance and their vibration was caused only by forces applied to their roots. The blades were designed to resonate with harmonics of the generator torque under asymmetrical conditions.

The measuring equipment is described. The oscillations of shaft and blading were measured by resistance strain gauges, amplified and recorded on an oscillograph. The circuit of the model transmission line is given in Fig.2, its parameters correspond to those of the Kuibyshev Power Station and the Kuibyshev to Moscow transmission line.

Two series of tests were made to determine the nature of the changes in the elastic torque. These were three and two-phase short circuits. The corresponding oscillograms are given in Fig.3. These show that only asymmetric short circuits cause a periodic component of torque. Fig.4 shows oscillograms of blade oscillation with a natural frequency of 100 c/s which shows that even under normal conditions the blade oscillates at its natural frequency, but only with small amplitudes. The amplitude is greatly increased by two-phase but not by three-phase short circuit.

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8(2) 307/161-58-4-1/20

AUTHOR: Dabagyan, Areg Vagarshakovich, Candidate of Technical Sciences, Docent

TITLE: Equations for the Joint Electromechanical Vibrations of Rotors of Hydraulic Generator- and Turbogenerator Plants (Uravneniya sovmestnykh elektromekhanicheskikh kolebaniy rotorov gidro- i turbogeneratornykh ustanovok)

PERIODICAL: Nauchnyye doklady vysshey shkoly. Elektromekhanika i avtomatika, 1958, Nr 4, pp 3-10 (USSR)

ABSTRACT: On the basis of the method of Lagrange-Maxwell differential equations are derived here for the joint electromechanical processes resulting at different electrical methods of operation in the rotor. A system is investigated consisting of a hydraulic turbine with rotating blades, and a generator with salient poles and a damper winding. Multipolar machines are regarded as bipolar. In figure 1 the rotor is schematically represented in first approximation. The mass with the moment of inertia I_G simulates the rotor of the generator, that with I_T the rotor of the turbine. The pendulums with the mass m_i and the rigidity e_i simulate the i-th blade at oscilla-

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Equations for the Joint Electromechanical Vibrations of Rotors of Hydraulic Generator- and Turbogenerator Plants

tion of it in the k-th tone. Since the determination of the blade frequency is still an undissolved problem the frequency is taken as presupposed. Thereby it is possible to simulate the blade by a system with only one degree of freedom. Such a model allows to determine the frequency spectrum of the joint oscillations of the system in the range of the selected blade frequency. This permits to state the difference between this spectrum and the spectrum of the partial frequencies of the blades and the electrical parts which are determined independently of it. The electrical part of the system is investigated as usual (Refs 1, 2). The motion-equations are formed according to the method of Lagrange-Maxwell. General coordinates for the motion of the mechanical system and general velocities for the electrical part of the system are selected. The motion energy, the potential energy, the dissipation function of Rayleigh and the general forces are determined or at least the equations are derived necessary for the determination of these values. For the derivation of the differential equations it was supposed that the rotor consists of two single masses connected together by an elastic massless shaft. - At

Equations for the Joint Electromechanical Vibrations of Rotors of Hydraulic Generator- and Turbogenerator Plants

a steam- or gas turbine the number of rotor masses will be essentially greater. Accordingly, the number of equations is greater but principally the equations will not differ from the given ones. The higher frequency of the rotor of a hydraulic generator can be determined if the distributed shaft masses of the plant are considered. Besides the above mentioned equations in this case also the equation of the shaft with distributed parameters has to be considered in form of partial differential coefficients. A system of equations is received representing a further generalization of the equations of Park-Gorev. - If the electric coordinates are considered zero on derivating the formulas, equations are received, expressing the common oscillations of the rotor and the blades. If all mechanical coordinates with the exception of γ_G, are equal zero, the equations of Park-Gorev are received. γ_G is the angle of rotation of the longitudinal axis of the generator-rotor-winding against the axis of the A-phase. There are 1 figure and 5 references, 4 of which are Soviet.

SOV/161-58-4-1/28

Equations for the Joint Electromechanical Vibrations of Rotors of Hydraulic Generator- and Turbogenerator Plants

ASSOCIATION: Kafedra dinamiki i prochnosti mashin Khar'kovskogo Politekhnicheskogo instituta
(Chair of Dynamics and Stability of Machines at the Khar'kov Polytechnic Institute)

SUBMITTED: June 23, 1958

Card 4/4

DABAGYAN, A.V.

Refinement of the equation of shared electromechanical rotor oscillations of Francis-type hydraulic turbine generator units. Nauch.dokl. vys.shkoly; elektromekh. i avtom. no.1:52-59 '59. (MIRA 12:11)

1. Rekomendovana kafedroy elektricheskikh mashin Moskovskogo energeticheskogo instituta.
(Turbogenerators--Vibration)

SOV/144-59-10-15/20

AUTHOR: Dabagyan, A.V., Candidate of Technical Sciences, Docent

TITLE: An Analysis of Blade Failures of Hydro-alternator Fans

PERIODICAL: Izvestiya vysshikh uchebnykh zavedeniy, Elektromekhanika, 1959, Nr 10, pp 137 - 145 (USSR)

ABSTRACT: This article discusses the causes and effects of vibration on fan blades in alternators. Damage to fan blades occurred on 66-MW alternators of Swedish manufacture; the blade design is illustrated in Figure 1. The blades failed at the notch, above the root, and were replaced by new ones without notches, which have since operated satisfactorily. Tests were made at the Khar'kov Polytechnical Institute to find the causes of the trouble. Determinations were made of the natural frequency of the blades and the shape of the vibrations and of the stresses incurred by machining the notches. The test equipment with a blade in position is illustrated in Figure 2. Strain gauges were fixed to the blades at the positions shown in Figure 3. It was found that the fundamental frequency of the blades was about 100 c.p.s. and that the effect of the notch was to cause a stress concentration of 2.45 units. The centrifugal

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stress was not greater than 200 kg/cm, which is quite safe, so that the blades could not have failed through static stressing. However, since the natural frequency of the blades was about 100 c.p.s. and the fractures were of fatigue character, it is reasonable to suppose that the cause of the fault was a periodic component of the alternator torque.

In a previous work, the author has shown that there is a 100-cycle component in the torque if the current loading of the alternator is not symmetrical but in the present case, the symmetry, if any, was small. In order to evaluate the 100-cycle component of the torque, tests were made on a large hydro-alternator. Two rods each with a natural frequency of 100 cycles were fixed to the coupling on the turbine shaft and their vibrations were recorded by means of strain gauges. A schematic diagram of the arrangement is shown in Figure 4. Oscillograms of the strain-gauge readings were taken at various alternator loadings and the 100-cycle stress in the rods was calculated.

An Analysis of Blade Failures of Hydro-alternator Fans

The method of calibrating the rod is explained and torque oscillations of the rotor were determined. The tests on these large hydro-alternators showed that even a small current asymmetry of the order of 2.5% can set up appreciable stresses in parts fixed to the rotor. Of course, the test rods were fixed to the coupling, whereas the blades that failed were directly attached to the generator rotor; therefore, a special model was made up to investigate combined oscillations of rotor and blades. It consisted of a heavy disc on a short shaft running freely between ball bearings. Four rods were fixed to the disc to represent the fan blades. Oscillations were set up by light taps, applied in a tangential direction either to the disc or to the rods and were recorded with strain gauges. Formulae are derived for the oscillations, and their values, as calculated from Eq (9), are compared graphically with the recorded oscillograms in Figure 5. It will be seen that agreement is good. These tests and calculations indicate that vibrations of blades fixed to a disc of large but finite

DABAGYaN, A. V. Dr. Tech Sci — (diss) "Certain Vibration Processes in the Rotors of Turbo- and Hydrogenerator Devices During Unsymmetrical and Asynchronous Generator Operations," Khar'kov, 1960, 37 pp, 150 copies (Khar'kov Polytechnical Institute im V. I. Lenin) (KL, 47/60, 100-101)

S/143/60/000/009/007/007/XX
A189/A026

AUTHOR: Dabagyan, A.V., Candidate of Technical Sciences

TITLE: On the Hydraulic Back Shock Caused by the Increased Closing Speed of the Guide Unit

PERIODICAL: Energetika, 1960, No. 9, pp. 107 - 114

TEXT: The author describes a method for calculating the hydraulic back shock in the suction pipe of a low-head turbine. The method gives an approximate estimation of the degree of danger due to this shock at different closing speeds of the guide unit. Calculation formulas are given. Deformation oscillograms of turbine shaft and blades were taken from a hydroturbine in the DGES imeni V.I. Lenina (Russian: - the Dnepropetrovskaya Gidroelektricheskaya Stantsiya (Dnepropetrovsk Hydroelectric Power Plant). There are 3 figures and 3 Soviet references.

ASSOCIATION: Khar'kovskiy politekhnicheskiy institut imeni V.I. Lenina (Khar'kov Polytechnical Institute Imeni V.I. Lenin)

SUBMITTED March 28, 1960

Card 1/1

DABAGYAN, A.V., kand.tekhn.nauk, dots.

Equations of unsteady rotor oscillations of hydroelectric generating systems in asynchronous operation. Izv. vys. ucheb. zav.; energ. 4 no.2:20-26 F '61. (MIRA 14:3)

1. Khar'kovskiy politekhnicheskiy institut imeni V. I. Lenina.
(Turbogenerators)

DABAGYAN, A.V.; dotsent, kand.tekhn.nauk

Analysis of the equations of nonstationary oscillations of the rotors of hydrogenerator system in asynchronous operation. Izv. vys. ucheb. zav.; energ. 4 no.3:1-10 Mr '61. (MIRA 14:3)

1. Khar'kovskiy politekhnicheskiy institut imeni V. I. Lenina.
(Electric generators)
(Hydraulic turbines)

DABAGYAN, Areg Vagarshakovich, doktor tekhn.nauk, dotsent; KHATSINOVA, Ella Naumovna, inzh.

Concurrent electromechanical oscillations of the rotors of turbogenerators and hydrogenerators during steady state nonsymmetrical operation. Izv. vys. ucheb. zav.; elektromekh. 5 no.12:1408-1412 '62. (MIRA 16:6)

1. Khar'kovskiy politekhnicheskiy institut (for Dabagyan).
2. Khar'kov'skiy zavod tyazhelogo elektromashinostroyeniya (for Khatsinova).
(Electric power distribution) (Turbogenerators)

DABAGYAN, A. V.; ROZENBERG, O. O.; SUSHCHUK-SLYUSARENKO, I. I.; GERMAN, S. I.

Vibration strength of welded hydraulic turbine shafts determined by modeling. Avtom. svar. 15 no.11:37-43 N '62. (MIRA 15:10)

1. Khar'kovskiy politekhnicheskiy institut imeni V. I. Lenina (for Dabagyan). 2. Ordena Trudovogo Krasnogo Znameni Institut elektrosvarki imeni Ye. O. Patona AN UkrSSR (for Rozenberg, Sushchuk-Slyusarenko). 3. Khar'kovskiy turbinnyy zavod imeni S. M. Kirova (for German).

(Shafting—Welding)
(Hydraulic turbines—Models)

L 8458-65 Po-4 AFGC(b)/ASD(a)-5/SSD/AFETR/AFWL(p)/RAEM(i)/ESD(c)/ESD(dp)/ESD(t)/RAEM(t)

ACCESSION NR: AP4048690 S/0144/64/000/008/0971/0978

AUTHOR: Dabagyan, A. V. B

TITLE: Determination of the physical parameters of a transmitting system from the transient conductance function

SOURCE: IVUZ. Elektromekhanika, no. 8, 1964, 971-978

TOPIC TAGS: information transmission, information transmitting system, information storage, information retrieval, transfer function, linear system

ABSTRACT: To solve a series of practical problems it is necessary to determine the transfer functions of real linear systems, the parameters of which do not vary with time. An approximate method is shown which permits the processing of results of rather simple experiments for the determination of transfer functions, and consequently, a differential equation of the transmitting system. Usually such problem arises in the investigation of the properties of measuring channels which form open circuits, closed loops of

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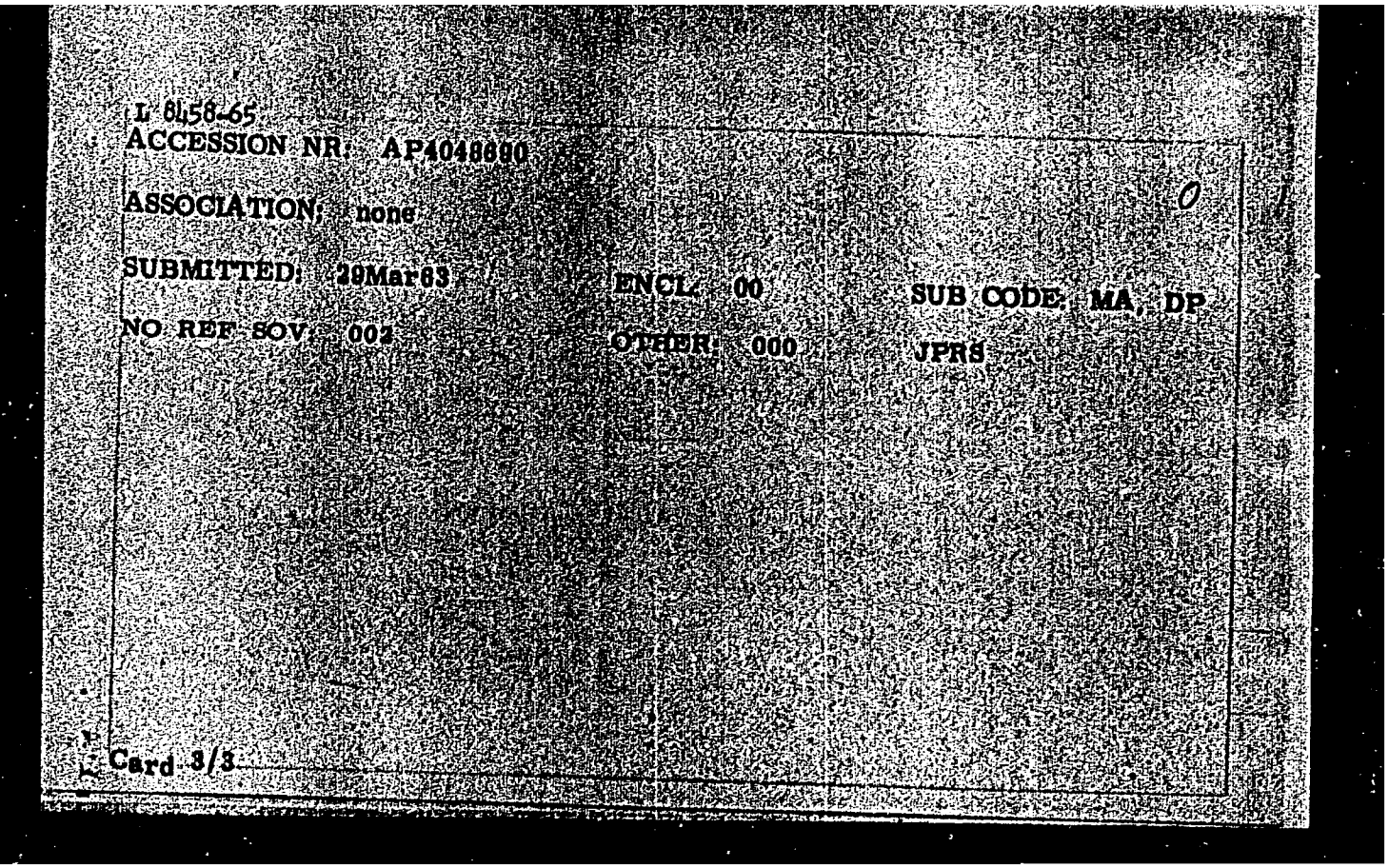
L 8458-65
ACCESSION NR: AP4048690

automatic control systems; electrical and mechanical filters, in the investigation of oscillations of electrical, electro-mechanical and elastic systems. Primarily, all of these systems can be separated into two groups -- into transmitting systems without feedback and systems with feedback. As a transmitting system without feedback, the circuit of a measuring channel is investigated. The peculiarity of measurement devices, intended only for the gathering of information, is the directional transmission of information. Thus, information, obtained at the output, does not affect information arriving at the input. If in such systems energy processes, related to the transmission of information, occur so, that information and the energy, consumed for its transmission, is not transmitted to one of the preceding system elements from the output of each subsequent element, then external as well as internal feedback does not exist in the system. An equation is derived which expresses, in the first approximation, the magnitude of unknown parameters in the system, compiling a series of sequential approximation based on least squares. It is always possible to find a set of corrections to parameter values, each of which is always less than any preassigned number

Card 2/3



L 8458-65
ACCESSION NR: AP4048890

ASSOCIATION: none

SUBMITTED: 29Mar63 ENCL: 00 SUB CODE: MA, DP

NO REF SOV: 002 OTHER: 000 JPRS

Card 3/3

DABAGYAN, A.V., doktor tekhn. nauk, prof.

Unit for fatigue tests of large shaft models for hydraulic turbines and hydraulic generators. Vest. mashinostr. 44 no.5:38-41 My '64. (MIRA 17:6)

DABAGYAN, Areg Vagarshakovich, doktor tekhn. nauk, prof.

Determination of the physical parameters of a transmitting system using the function of the transfer conductance. Izv. vys. ucheb. zav.; elektromekh. 7 no.8:971-978 '64. (MIRA 17:10)

1. Khar'kovskiy politekhnicheskiy institut.

S/137/62/000/001/079/237
A060/A101

AUTHORS: Piryazev, D. I., Golubov, M. M., Dabagyan, I. P., Timofeyev, D. I., Meleshko, A. M., Kovynev, M. V.

TITLE: The roll separating force of the metal and the loading of the main motors in the course of rolling on the thick sheet mill 2800

PERIODICAL: Referativnyy zhurnal, Metallurgiya, no. 1, 1962, 4 - 5, abstract 1D21 ("Sb. tr. Ukr. n.-i. in-t metallov", 1961, no. 7, 165 - 177)

TEXT: The authors studied the power conditions for rolling at the thick-sheet mill 2800 of the Plant imeni Voroshilov. The mill is designed for rolling sheets with thickness 6 - 50 mm, width 2,500 - 2,600 mm. It consists of a stand with vertical rolls, a roughing two-high stand with working rolls 1,150 mm dia, a universal finishing four-high stand 800/1400. The stands are arranged in a sequence. The roll separating force of the metal in the roughing and the finishing stands was measured by means of force meters with wire tensometers. The force meters were welded to the pedestals of the working stands on the side of drive. The pulses from the tensometers were recorded by a magnetoelectric oscillograph ПОБ -14 (РОВ-14). A calculation of the forces from the torque was

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The roll separating force of...

carried out to verify the values determined by the force meters. The mean pressures were calculated from the total forces obtained experimentally. Simultaneously with the measurement of the forces, the operation of the main drive motors was oscillographed. The oscillograms recorded the current, voltage, and the number of revolutions of the motors. The investigations have demonstrated that: 1) the separating force of the metal on the rolls of the four-high stand is, in all the cases investigated, below the admissible; 2) the closest agreement with the experimental data is given by the values of the mean pressures as calculated by the Golovin-Tyagunov method; 3) the main motors of the mill 2800 are not utilized to full capacity.

G. Grigoryan

[Abstracter's note: Complete translation]

Card 2/2

S/137/60/000/011/017/043
A006/A001

Translation from: Referativnyy zhurnal, Metallurgiya, 1960, No. 11, p. 117, # 26141

AUTHOR: Dabagyan, N.P.

TITLE: Measuring the Pressure of the Metal on Blooming and Sheet-Rolling Mill Rolls

PERIODICAL: Tr. Mezhvuz. nauchno-tekhn. konferentsii na temu: "Sovrem.dostizh. prokatn. proiz-va", Vol. 2, Leningrad, 1959, pp. 380 - 386

TEXT: The author investigated experimentally the metal pressure on the rolls, voltage and revolution of motors when rolling on blooming and sheet rolling mills, in order to intensify and rationalize reduction conditions. It was found that when rolling sheets on a 2250 mill, the force in various passes fluctuates within 889 - 1,895 tons. This causes non-uniform motor loads and increases undulation and corrugation of the sheets. The author determined the dependence of metal pressure on the rolls on temperature during the rolling of sheets of differ-

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S/137/60/000/011/017/043
A006/A001

Measuring the Pressure of the Metal on Blooming and Sheet-Rolling Mill Rolls

ent thickness. The metal pressure on the blooming mill varies within 500 - 1,600 tons, a maximum is reached in 3 - 6 passes. New reduction conditions were recommended, assuring a more uniform loading of the mill over the passes. This raised the efficiency of the sheet rolling mill by 5 - 10% and that of the blooming mill by 4.5 - 8%.

L. M.

Translator's note: This is the full translation of the original Russian abstract.

Card 2/2

DABAGYAN, N.P.; CHUB, V.M.; TIMOFEYEV, D.I.; SHUL'GA, Ye.A.

Pack rolling of large-size, two-layer steel plate. Met.i gornorud.prom. no.5:29-33 S-O '62. (MIRA 16:1)

1. Ukrainskiy institut metallov (for Dabagyan, Chub).
2. Kommunarskiy metallurgicheskiy zavod (for Timofeyev, Shul'ga).
(Rolling (Metalwork)) (Plates, Iron and steel)

FILIPPOV, I.N.; GUNIN, I.V.; Prinimali uchastiye: DABAGYAN, N.P.; CHETVERIKOV, A.V.; MIROSHNICHENKO, V.G.; FRADIN, M.D.; PAVLOVSKIY, V.Ya.; FIL'CHAKOVA, V.A.; ALEKSANDROVA, L.A.; DUBROVIN, F.S.

Investigating the buckling of webs on lightweight I-beams. Stal' 23 no.10:915-918 O '63. (MIRA 16:11)

1. Ukrainskiy institut metallov. 2. Ukrainskiy institut metallov (for Dabagyan, Chetverikov, Miroshnichenko). 3. Zavod "Azovstal'" (for Fradin, Pavlovskiy, Fil'chakova, Aleksandrova, Dubrovin).

BR

ACCESSION NR: AP4043485 S/0133/64/000/008/0718/0721

AUTHOR: Dabagyan, N.P., Chub, V.M., Timofeyev, D.I., Khoroshilov, N.M., Loktionov, P. Ya., Shul'ga, Ye. A.

TITLE: Experiences in the production of two-layer sheet steel at the Kommunar metallurgical plant

SOURCE: Stal', no. 8, 1964, 718-721

TOPIC TAGS: steel rolling, rolling mill, sheet steel, two layer sheet steel, pack rolling, steel cladding, cast cladding, bimetal, clad steel

ABSTRACT: In a discussion of the pack-rolling of two-layer sheet steel, introduced in 1963 at the Kommunar plant, the authors specify the difficulties encountered in the previous cast-cladding process and indicate that higher technological efficiency and production on a much larger scale can be achieved with the new process without affecting the high quality of the product. To produce two-layer sheets, symmetrical four-layer packs whose size is prescribed by nomograms are assembled from the basic steel plates a, cladding plates b, and interlayers c, as shown in the Enclosure. The equations from which specifications of the pack components are found, the necessary nomograms and the details of the process are presented. An interlayer distribution curve for carbon, chromium and nickel in a

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ACCESSION NR: AP4043485

bimetal prepared by the pack-rolling process is shown. The diffusion of the elements was investigated by metallographic, electron microscopic and layer-by-layer spectral and chemical analyses, and by means of C^{14}. From the nomograms, pack specifications for two-layer 8-25 mm thick 20k + Kh17N13M2T steel sheets can be calculated, including the proper upper-to lower plate thickness ratio. This ratio (optimally about 1.08), designated the coefficient of equithickness, is introduced into the calculations to offset nonuniform metal expansion due to a temperature gradient across the pack during heat treatment. To reduce this effect, the temperature in the upper, lower and tempering section of the furnace is held at 1340-1360, 1320-1340, and 1240-1220C, respectively. Orig. art. has: 5 figures, 1 table and 4 formulas.

ASSOCIATION: Ukrainskiy nauchno-issledovatel'skiy institut metallov (Ukrainian Scientific Research Institute of Metals); Kommunarskiy metallurgicheskiy zavod (Kommunar Metallurgical Plant)

SUBMITTED: 00 ENCL: 01 SUB CODE: MM, IE

NO REF SOV: 000 OTHER: 000

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ACCESSION NR: AT4043485

ENCLOSURE: 01

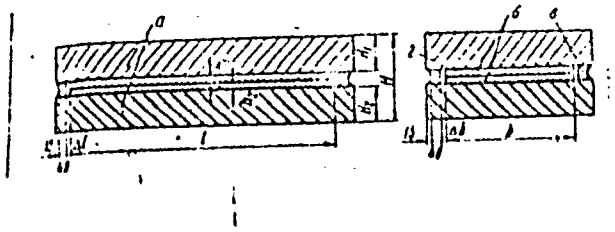

Fig. 1. Diagram of a symmetrical 4-layer pack: d - fire-proof partition; H_1 H_2; h_1 h_2.

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L 58363-65 EWI(m)/EWP(w)/EWA(d)/T/EWP(t)/EWP(k)/EWP(b)/EWA(c) Pf-4 AFMM/JD/HW
ACCESSION NR: AR5013021 UR/0137/65/000/004/I056/I056
669.15.018.85

SOURCE: Ref. zh. Metallurgiya, Abs. 4I350

AUTHOR: Dabagyan, N. P.; Sagitov, G. A.; Baraly, V. K.; Dodoka, L. I.

TITLE: Structure and properties of a three-layered Kh18N9T + St3sp + Kh18N9T steel

CITED SOURCE: Sb. tr. Ukr. n.-i. in-t metallov, vyp. 10, 1964, 210-215

TOPIC TAGS: metal cladding, metal mechanical property, steel

TRANSLATION: The steel was prepared by casting stainless slabs into molds and subsequently rolling the three-layered ingots. The untrimmed sheet had a width of 1100 mm, overall thickness of 6.0-6.3 mm, and cladding thickness of 0.75-0.85. The chemical composition of the steel was as follows (in %): Kh18N9T--0.09 C, 1.14 Mn, 10.55 Ni, 17.68 Cr, and 0.50 Ti; St3sp--0.020 C, 0.52 Mn, 0.16 Si. The mechanical properties of cross-sectional and longitudinal specimens were as follows, respectively: σ_b = 56.6 and 57.8 kg/mm^2; σ_b/σ_y = 0.755 and 0.740, τ_k = 30.0 and 39.0 kg/mm^2 and σ_{10} = 27 and 29.2%. The clad steel behaved like a homogeneous metal when cold

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bent until the sides touched. The optimum method of heat treatment of the steel is normalization from 900°C for 5 min which gives the clad layer satisfactory resistance to intergranular corrosion and the following high mechanical properties: σ_s = 36.6-40.4 kg/mm^2, σ_b = 54.2-56.4 kg/mm^2, σ_s/σ_k = 0.680-0.720, ζ_k = 22.0-29.5 kg/mm^2, and δ_{10} = 24.0-28.4%. The structure of the clad layers consists of austenite and uniformly distributed carbides of Cr; the structure of the base metal consists of grains of ferrite and perlite. At the layer boundaries there is a decarburized layer in the base metal which is about 0.1 mm thick. The microhardness of the base metal is 210 kg/mm^2, 161 kg/mm^2 for the decarburized layer, and 301-321 kg/mm^2 for the clad layer.

SUB CODE: MM ENCL: 00

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L 63080-65 EPA(s)-2/EWT(m)/EWP(t)/EWA(d)/EWP(v)/T/EWP(t)/EWP(k)/EWP(z)/EWP(b)/EWA(c) LIP(c) MJW/JD/HM/HW/JG

ACCESSION NR: AR5015185 UR/0137/65/000/005/1055/1055 52 45 G

SOURCE: Ref. zh. Metallurgiya, Abs. 51356

AUTHOR: Dabagyan, N. P. 65

TITLE: Effect of production method on the structure and properties of two and three layer steels 44,55

CITED SOURCE: Sb. tr. Ukr. n.-i. in-t metallov, vyp. 10, 1964, 225-232

TOPIC TAGS: steel, metal cladding, metal rolling, metal welding, sandwich rolling, composite material/Kh18N9T steel, Kh18N12M2T steel, Zsp steel, 20K steel, OKh13 steel, Kh18N9T steel, 09G2 steel

TRANSLATION: An investigation has been made of two layer steels of industrial types Kh18N9T + Zsp, Kh18N12M2T + 20K, OKh13 + Zsp steel, and Kh18N9T + 09G2, produced by the sandwich method according to technology worked out in the UNIIM and the Kommunarsk metallurgical plant. Experimental steels Kh18N9T + Zsp steel and Kh18N9T + Zsp steel + Kh18N9T produced by cast cladding and

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Kh18N9T + Zsp steel produced by the method of electric flux welding with the use of a fusable welding orifice (ferrite variant). It was established that two and three layer steels produced by sandwich rolling and cast cladding correspond generally to the structure of steels of analogous brands. Changes in the metals of the cladding and base layers occur only within a narrow interval near the separation boundary. Two layer steels, produced by electric flux welding consist in fact of three metal layers, the cladding, transition, and base layers. The transition layer (the former electric flux seam) consists of martensite, toward whose needles the carbides and carbonitrides are oriented. The presence of the transition zone is the reason for the brittleness of the bimetal investigated and for the unsatisfactory results of bending tests. By a layer-by-layer spectral analysis, curves were obtained for the distribution of carbon, chromium, and nickel in the cladding and base layers of the steels investigated. The ductility of two layer steels produced by sandwich rolling is considerably lower than that of steel produced by the electric flux method; this is a result of the absence of a zone of brittle components at the separation boundary of the layers.
I. Tulupova.
SUB CODE: MM ENCL: 00

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ACC NR: AP7000597 (N) SOURCE CODE: UR/0129/66/000/011/0055/0058

AUTHOR: Dabagyan, N. P.; Nikitina, O. I.; Ivanova, N. K.; Chub, V. M.

ORG: Ukrainian Scientific Research Institute of Metals (Ukrainskiy nauchno-issledovatel'skiy institut metallov)

TITLE: The influence of nickel-interlayer thickness on the structure and properties of clad steel

SOURCE: Metallovedeniya i termicheskaya obrabotka metallov, no. 11, 1966, 55-58

TOPIC TAGS: metal joining, bimetal, nickel plating, metal cladding, steel /Kh18N10T steel, Kh17N13M2T steel

ABSTRACT: The thickness of a nickel interlayer plays a major role in promoting or inhibiting diffusion processes at the boundaries of metal joints and affects the properties and structure of the boundary zone. To determine this effect with respect to the strength of the joint and the structure of the bimetal, investigations were carried out on specimens made from laboratory and industrial clad steel.

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ACC NR: AP7000597

The laboratory test pieces were made of rolled packs of Kh18N10T and St. 3sp types of steel with and without nickel interlayer, the thickness of the interlayer being 10, 25, 40, 65, and 90 microns. The tests were conducted for shear and tensile strength, notch toughness, cohesion strength, metallographic investigations, and spectrum analysis. The industrial test pieces were made of 10—14-mm-thick clad-steel sheets with a cladding layer of Kh17N13M2T steel, and basic layer from 20K type steel wiithout ant with nickel plate of a thickness of 25—30, 40, 50, 65, and 90 microns. The cohesion strength of both layers is found to increase as the thickness of the nickel interlayer is increased. The latter also affects diffusion at the metal layer interface and as a result the hardness and microhardness, as well as changes in the concentration of alloying elements. The maximum carbon consentration is found to be inversely proportional to the thickness of the nickel interlayer. The same is observed with respect to carbon diffusion. In steel clad without interlayer, there occurs complete decarbonization of the boundary layer of the non-carbon steel. A nickel interlayer lowers decarbonization of the boundary layer of St. 3sp steel and hinders the enrichment of the cladding steel in carbon.

[KP]

SUB CODE: 11/SUBM DATE: none/

Card 2/2

AUTHOR: Dabagyan, N. V. 20-119-2-57/60

TITLE: The Role of the Mesenchyme in the Development of the Pigment-Epithelium of the Eye in Acipenser gueldenstaedti (Rol' mezenkhimy v razvitii pigmentnogo epiteliya glaz osetra)

PERIODICAL: Doklady Akademii Nauk SSSR, 1958, Vol. 119, Nr 2, pp. 391-394 (USSR)

ABSTRACT: As is known the capacity of regeneration of a lost retina is absent in all examined vertebrates in adult age. One exception is Triton, in which the retina may be regenerated from transformed cells of the pigment epithelium (ref. 15). With other vertebrates the outer layer of the embryonic eyecup may also develop to the retina (refs. 4,7,9,10, 12-14). It has been found with amphibia, that the contact of the cells of the rear wall of the eye with mesenchyme cells favor conditions for the accumulation of pigment grains in the pigment epithelium (refs. 4-8). It is the purpose of the present work to investigate the mechanisms of the processes of differentiation of the outer and inner eyecup layers of the embroyos of the sturgeons Acipenice gueldenstaedti Brandt. The

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experiments were carried out at the stage of the optic vesicle (25.-26 stage, according to ref. 2). The mesenchyme was easily removed from the vesicles, whereafter 33 vesicles were homoplastically transplanted: I. Series - into the pericardium cavity and into the body cavity; II. Series - under the skin, into the gill cavity and to the somite of the embryos of the same age as the donor. In the first series the grafts should be missing mesenchymic surroundings, in the second series, however, be completely surrounded by it. The eyes of the graft carrier served as control (fig. 1). They are described in full detail. Results of both series of experiments are illustrated in table 1. They make it possible to draw some conclusions: 1. The eye rudiments of the said stages (eye vesicle) are able to develop in the ordinary way (formation of a 2--layer eyecup, of a pigment epithelium and of a retina) as well as to be transformed into a single layer by entirely becoming a retina. 2. For a normal development of the eye together with the formation of the pigment epithelium it is necessary that the eye rudiment is surrounded by the mesenchyme. Without the surroundings of a mesenchyme the

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eye rudiments develop entirely into a retina. These data achieved with sturgeons agree with those of the amphibia and mammals (refs. 4-7,9). The kind of mesenchymic surroundings bears influence on the character and the degree of pigmentation of the pigment epithelium. Finally the structure and the development of the retina and of the pigment epithelium of the normal eye and of the eye transplanted to various parts of the body are described. There are 3 figures, 1 table and 15 references, 9 of which are Soviet.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova (Moscow State University imeni M. V. Lomonosov)

PRESENTED: December 13, 1957, by I. I. Shmal'gauzen, Member, Academy of Sciences, USSR

SUBMITTED: December 10, 1957

Card 3/3

DABAGYAN, N. V., Cand of Bio Sci -- (diss) "Regenerative Abilities and Laws for the Development of Eyes in Embryoes of Sturgeon," Moscow, 1959, 14 pp (Moscow State Univ im Lomonosov) (KL, 2-60, 111)

17(4)
AUTHOR: Dabagyan, N. V. SOV/20-125-4-70/74

TITLE: Regulatory Properties of the Eye in the Embryos of Acipenseridae (Regulyatsionnyye svoystva glaz zarodyshey osetrovykh ryb)

PERIODICAL: Doklady Akademii nauk SSSR, 1959, Vol 125, Nr 4, pp 938-940 (USSR)

ABSTRACT: At the time of their formation (optic vesicle stage) all parts of the eye rudiment of Acipenseridae can develop as well into the retina as into a pigment epithelium. The formation of the latter occurs if the optic vesicles are enclosed by the mesenchyme (Ref 2). In this respect the eye rudiments of Acipenseridae do not differ from those of amphibia (Refs 5,6), birds (Ref 9) and mammals (Ref 8). The question is still unsolved within what lapse of time the material of the ectoderm can change into the retina and that of the entoderm under altered conditions of development into pigment epithelium. In order to solve this question experiments were made on the embryos of Acipenser gueldenstaedti and of Ac. stellatus. In the Ist series of experiments whole optic cups were transplanted into the pericardial cavity. In the IInd series of experiments the inner layer of the optic cup was transplanted under the ectoderm of the head, in the region of the auditory vesicle so

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that it was completely enclosed by the mesenchyme. From the results of the Ist and IInd series (Fig 1 a,b, 1 v) it becomes evident that the eyes of Acipenseridae (just like those of amphibia) early loose the capacity of redifferentiation of the retina (Ref 3). In the IIIrd series of experiments the inner layer of the optic cup with the lens was transplanted into the pericardial cavity, where there is no free mesenchyme. All grafts developed into retina. With respect to the lens the layers of the latter were normally oriented. This series can be considered as a control of series II. In the IVth series the outer layer of the optic cup was as far as possible cleaned of mesenchyme cells, segmented off, and transplanted into the pericardial cavity. In that case all layers of the retina were also developed. The photoreceptors were oriented towards the pericardial cavity. The results obtained show that both in the stage of the optic vesicle and of the optic cup the eye rudiment is strongly influenced by the surrounding mesenchyme. Outside of this influence pigment epithelium is never formed and the eye rudiment is able to develop entirely in the direction of the retina. In this respect the eyes of Acipenseridae are

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similar to those of amphibia (Ref 6) and differ somewhat from those of mammals, where this rule shows certain exceptions (Ref 8). The capacity of the retina to form pigment epithelium is already markedly reduced at the moment before it separates into layers, as this is the case in amphibia and birds (Refs 3,9). However, the pigment epithelium is still capable of changing at this stage. If mesenchyme surroundings and blood are lacking it becomes the retina. In this respect the eyes of Acipenseridae are similar to those of amphibia, birds, and mammals. There are 1 figure and 11 references, 8 of which are Soviet.

ASSOCIATION: Moskovskiy gosudarstvennyy universitet im. M. V. Lomonosova (Moscow State University imeni M. V. Lomonosov)

PRESENTED: November 20, 1958, by I. I. Shmal'gauzen, Academician

SUBMITTED: November 18, 1958

DABAGYAN, N.V.; ZHILOVSKIY, N.I.; KRUGLOV, S.S.

Microfauna and the stratigraphic position of the Shipot and Yalovetsk series of the Eastern Carpathians. Trudy UkrNIGRI no.5:106-124 '63. (MIRA 18:3)

DABAGYAN M.V.; MYATLYUK Ye.V.; PISHVANOVA, L.S.

New data on the stratigraphy of Tertiary deposits of Transcarpathia on the basis of a study of Foraminifera. Geol.sbor. [Lvov] no.2/3:220-236 '56. (MLRA 10:3)

1. Ukrainskiy vsesoyuznyy nauchno-issledovatel'skiy geologo-razvedochnyy neftyanoy institut. L'vov.
(Transcarpathia--Foraminifera, Fossil)

KUL'CHITSKIY, Ya.O. [Kul'chyts'kyi, IA.O.]; ZHILOVSKIY, N.I. [Zhylovs'kyi, M.I.]; DABAGYAN, N.V. [Dabahian, N.V.]; MAKSIMOV, A.V. [Maksimov, O.V.]; KHLOPONIN, K.L.

Stratigraphy of Paleocene and Eocene eastern Carpathian Mountains[with summary in English]. Dop. AN URSR no.3:310-314 '58. (MIRA 11:5)

1.Ukrains'kiy viddil Vsesoyuznogo naukovo-doslidnogo geologo-rozviduval'nogo naftovogo institutu. Predstavleno akademikom AN USSR O.S. Vyalovym.
(Carpathian Mountains--Geology, Stratigraphic)

DABAGYAN, N.V.

Upper Eocene Foraminifera in the Rakhov-Penin zone in the Carpathians. Trudy UkrNIGRI no.1:130-138 '59. (MIRA 12:12)
(Carpathian Mountains--Foraminifera, Fossil)

DARAGYAN, N.V.

Regeneration of the retina in the eyes of sturgeon embryos. Zhur. ob.biol. 21 no.1:48-53 Ja-F '60. (MIRA 13:5)

1. Chair of Embriology, Moscow State University.
(RETINA) (STURGEONS) (REGENERATION (BIOLOGY))

DABAGYAN, N.V.

Foraminifers from Oligocene sediments in the vicinity of Uzhka (Uzh River) in the Eastern Carpathians. Paleont. sbor. [Lvov] no.1:97-104 '61. (MIRA 15:9)

1. Ukrainskiy nauchno-issledovatel'skiy geologorazvedochnyy institut, L'vov.
(Uzh Valley (Carpathian Mountains)---Foraminifera, Fossil)

VYALOV, O.S., akademik; DABAGYAN, N.V.; KUL'CHITSKIY, Ya.O.

Recent data on the age of the Shipot and Dusino series in the Eastern Carpathians. Dokl. AN SSSR 142 no.4:896-899 F '62. (MIRA 15:2)

1. Institut geologii poleznykh iskopayemykh AN USSR i Ukrainskiy nauchno-issledovatel'skiy geologorazvedochnyy institut. 2. AN USSR (for Vyalov).
(Chernogora Range region—Geology, Stratigraphic)
(Svalyava region—Geology, Stratigraphic)

VYALOV, O.S., akademik; DABAGYAN, N.V. [Dabahian, N.V.]; VITRIK, S.P. [Vitryk, S.P.]; SHAKIN, V.A.

"Svalyava 1" a deep borehole in the Pieniny (Cliff) zone of the Carpathians. Dop. AN URSR no.5:631-635 '63. (MIRA 17:9)

1. Institut geologii goryuchikh iskopayemykh AN UkrSSR.
2. AN UkrSSR (for Vyalov).

DABAGYAN, N.V., [Dabahian, N.V.]; KUL'CHITSKIY, Ya.O. [Kul'chyts'kyi, IA.O.]; LOZYNYAK, P.Yu. (Lozyniak, P.IU.)

Cretaceous sediments in the Krosno zone of the Ukrainian Carpathians in the Gorgan region. Dop. AN URSR no.1:87-90 '65. (MIRA 18:2)

1. Ukrainskiy nauchno-issledovatel'skiy geologorazvedochnyy institut. Predstavleno akademikom AN Ukrainskoy SSR V.I. Vyalovym.

[illegible], [illegible]; [illegible], [illegible]

The "Pogrushchik" loading [illegible] for inclined mining. [illegible] tekh.-ekon. inform. no. 1:12-13 '61. ([illegible] 14:[illegible])
([illegible])

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DABAGYAN, V., kand.tekhn.nauk

"Fundamentals of metal cutting by "M.V.Kas'ian, I.A.Ter-Azar'ev. Reviewed by V.Dabagian.
(Metal cutting) (Kas'ian, M.V.)
(Ter-Azar'ev, I.A.)